

TARGET ZERO

Washington State's Multi-Agency Program for Highway Safety

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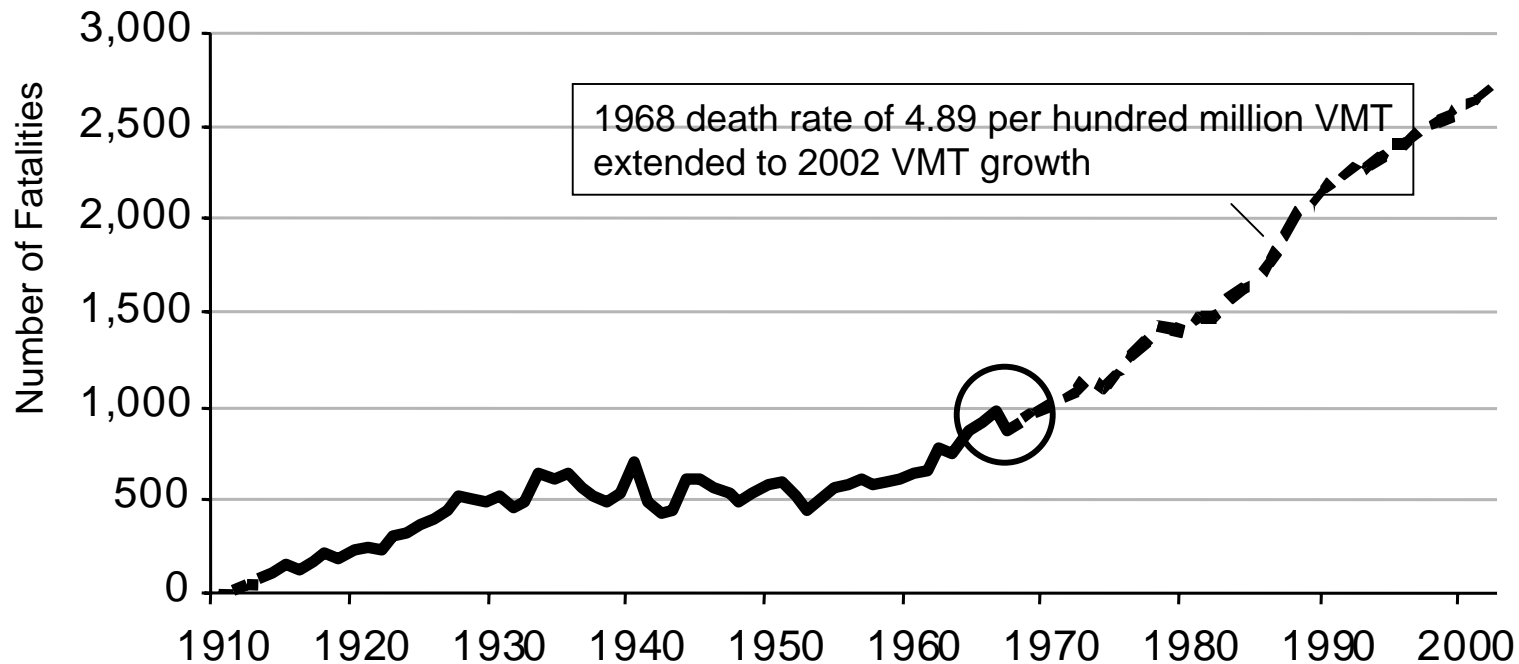
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Setting the Stage for TARGET ZERO

If 1968 fatality rates had continued, thousands could be expected to die on our state's highways.



Change is never easy. Change must be motivated by dissatisfaction with the status quo.

What Exactly is TARGET ZERO?

A Strategic Plan for Highway Safety

Target Zero is Washington State's vision for a safe and efficient traffic system with no deaths or disabling injuries by the year 2030.

TARGET ZERO: All The Players Make It Work

**In many other states highway safety responsibilities are centralized.
In Washington State a host of groups work together.**

Washington Traffic Safety Commission

- Governor, State of Washington
- Washington State Department of Transportation
- Washington State Patrol
- Department of Health
- Department of Licensing
- Superintendent of Public Instruction
- Department of Social and Health Services
- Association of Washington Cities
- Association of Washington Counties
- District and Municipal Court Judges Association



Governor Locke signs Washington's Primary Seat Belt Enforcement Law. June, 2002

The Washington Traffic Safety Commission and TARGET ZERO are supported by an array of stakeholders:

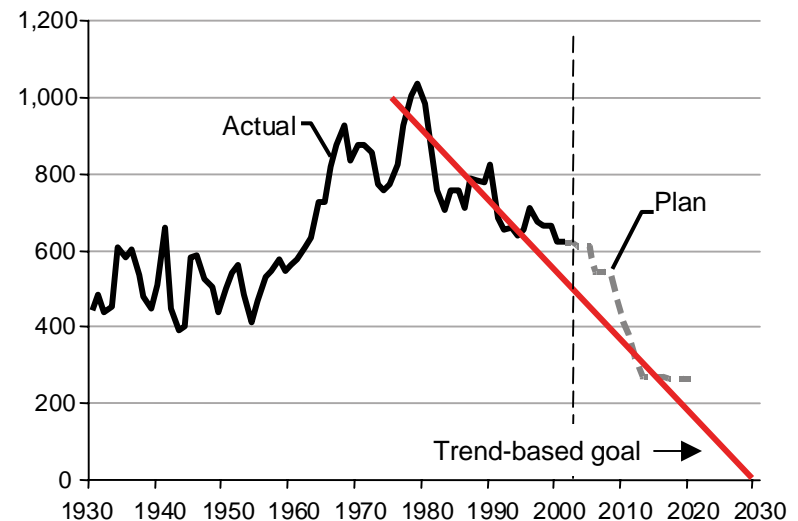
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|---|---|
| <ul style="list-style-type: none">▪ AAA of Washington▪ Washington Trucking Association▪ Spokane County▪ Safety Restraint Coalition▪ Spokane Parks and Recreation Department▪ Spokane Regional Health District▪ Cooper Jones Foundation▪ County Road Administration Board | <ul style="list-style-type: none">▪ Pierce County DUI Task Force▪ Bicycle Alliance of Washington▪ Feet First▪ Committee on Health Emergency Medical Services▪ Office of Emergency Medical and Trauma Prevention▪ House Legislative Transportation Committee Staff▪ Snohomish County Sheriff's Office▪ City of Puyallup |
|---|---|

TARGET ZERO: Set a Goal that Matters

- We can't prevent all crashes.
- Property damage can be insured against.
- Minor injuries are recoverable.

- Fatal injuries are unacceptable
- Disabling long-term injuries are unacceptable.

A plan and a trend-based goal



No Fatalities by the Year 2030

What Will it Take to Achieve TARGET ZERO?

- Public support
- Funding
- Agencies' commitment & coordination
- Implementation of TARGET ZERO's twelve priorities



- | | |
|---|--|
| <input type="checkbox"/> Seat Belt Use | <input type="checkbox"/> Road Environment |
| <input type="checkbox"/> Impaired Drivers | <input type="checkbox"/> Emergency Response |
| <input type="checkbox"/> Aggressive Drivers | <input type="checkbox"/> Pedestrians |
| <input type="checkbox"/> Young and Senior Drivers | <input type="checkbox"/> Bicyclists |
| <input type="checkbox"/> Sleepy Drivers | <input type="checkbox"/> Trucks |
| <input type="checkbox"/> Work Zone Safety | <input type="checkbox"/> Data and Technology |



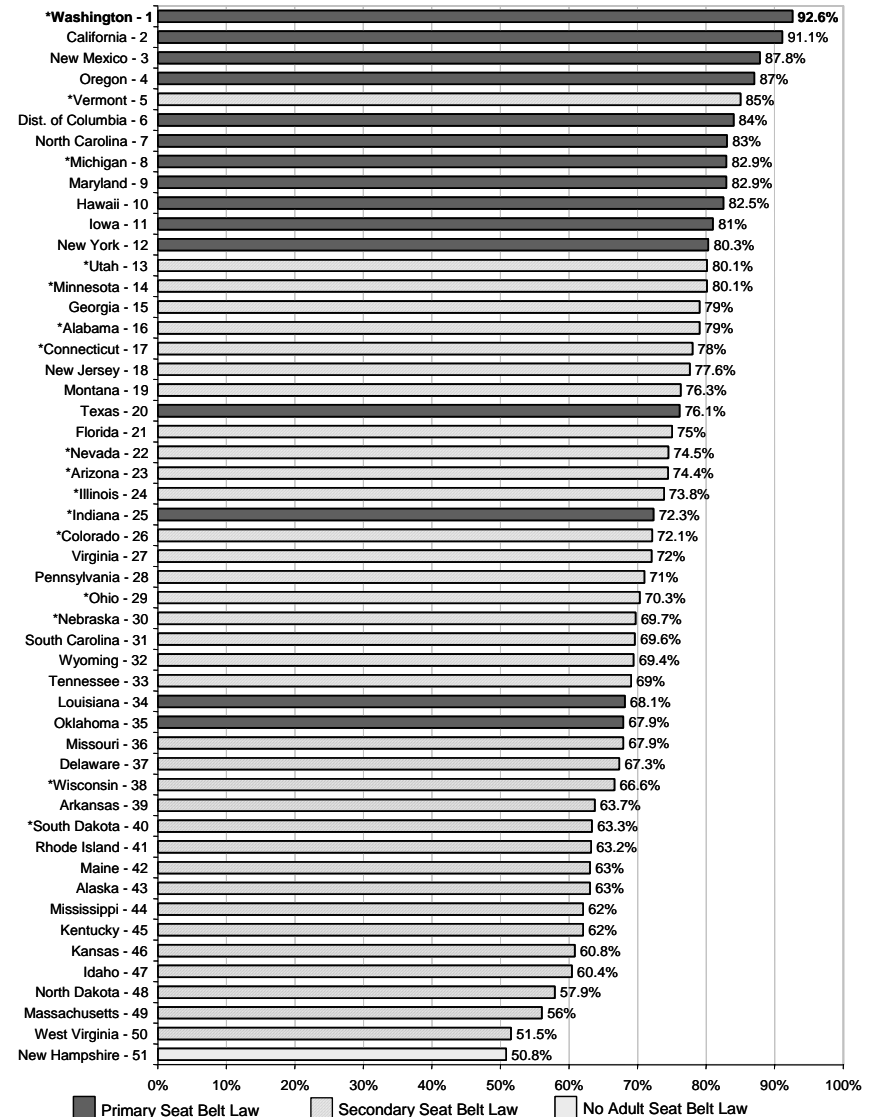
Seat Belt Use: The Top Priority

Why Seat Belts?

- 380 died last year in crashes where they were unbelted.
- Seat belts would have saved 270!
- Treating unbelted injured crash victims cost Washington *at least* \$55,000,000 each year.
- Buckling up the non-user is where the “payoff” will occur!

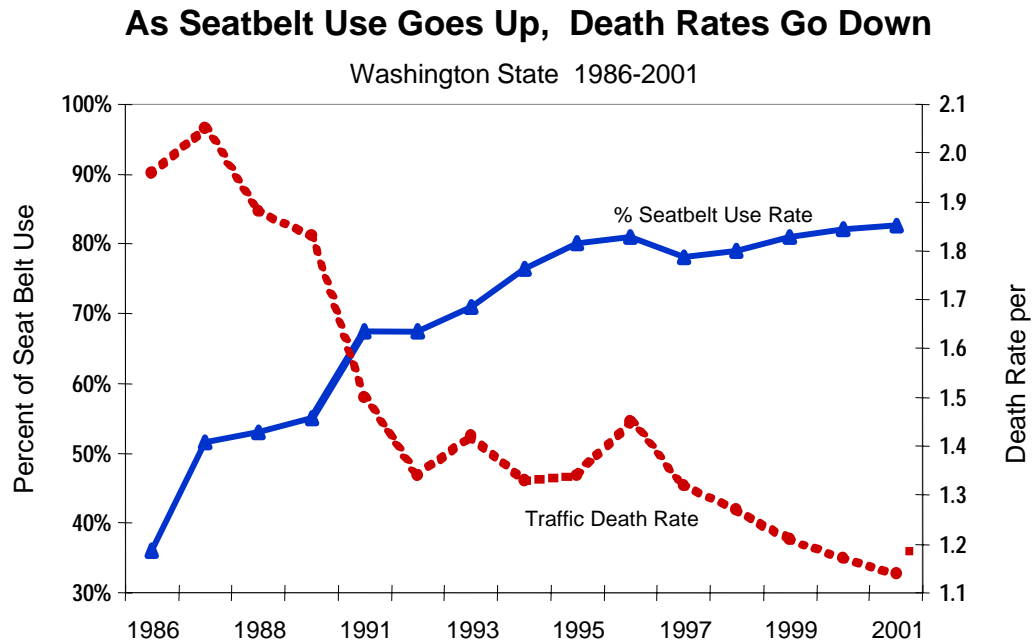
* Sources: Washington Traffic Safety Commission. The “Click-It or Ticket” Survey reported an increase for Washington from 80.8% to 92.6% over a four-month period. Compared to the 2001 national seat belt use statistics, Washington state is now among the highest in the nation in seat belt use.

State-by-State Seat Belt Use Rates*



*2002 Data

Seat Belt Use: Rational Arguments Persuade Almost Everyone



**92% of the population get it!
They use seat belts.**



Compelling Arguments for the Remaining 8%: Enforcement

Would you start wearing a seat belt?

“Two tickets would do it!”



Aggressive Messages, Real Enforcement



- **Billboards**
- **Signs on Bus Tailboards**
- **Roadside Signs**

- ☒ Reality must match the tough talk in WSP's advertising.
- ☒ Massive police enforcement planned for May 20 - June 30, 2003.

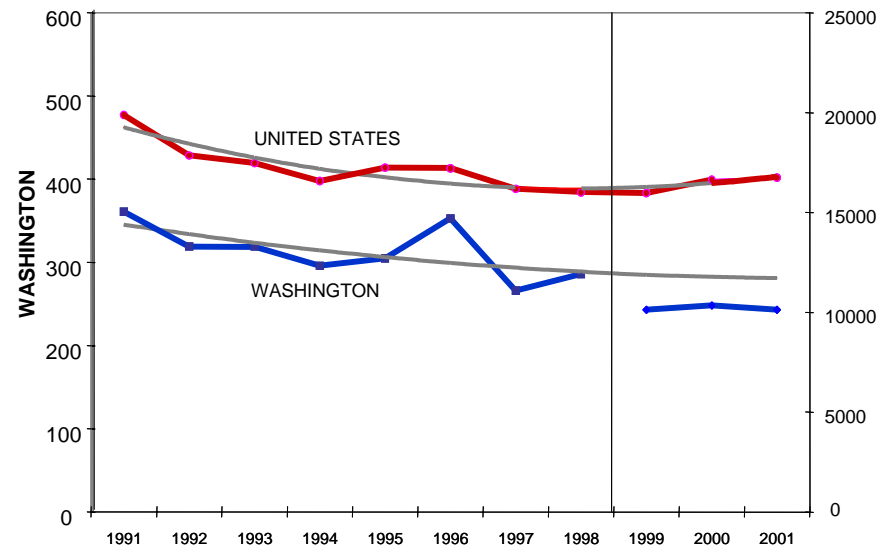
☑ Impaired Drivers: Another Enforcement Priority

- 0.08 DUI Law
- Breath Interlocks
- First Day Appearance
- Suspensions
- Vehicle Impound
- Jail Time
- Home Confinement

Increased Focus on Impaired Drivers but with Less Payoff...Solving the alcohol issue is daunting and expensive.

Washington has a long way to go in reducing alcohol-related fatalities. In 2001 Washington ranked 30th in the nation for motor vehicle fatalities involving high blood alcohol concentration.

Alcohol Related Deaths
Washington as Compared to the United States



☑ Aggressive Drivers

In 2002:

- **Speed Violations** Enforcement up 22%
- **Following too Close** Enforcement up 71%
- **Aggressive Driving** Enforcement up 772%
- **Left Lane Violation** Enforcement up 88%
- **Seat Belt Violations** Enforcement up 10%



WSP Departmental Management Philosophy

- Accountability Driven Leadership
- Data Driven Decision Making
- Intelligence-Led Policing
- Strategic Advancement Form

WSP Field Operations Bureau Core Missions

- DUI
- Speed - Dangerous
- Aggressive Driving
- Occupant Protection

- Fatal collisions on interstate highways reduced by 24%.
- Injury collisions on all roadways patrolled by WSP are down 4%.

- Fatal collisions on interstate highways reduced by 42%.
- Injury collisions on all roadways patrolled by WSP are down 16%.

- Fatal collisions on interstate highways reduced by 30%.
- Injury collisions on all roadways patrolled by WSP are down 10%.

FOB Core Mission Statistics • 671 Line Troopers				
	2001	2002	Difference	% Change
DUI	13,708	18,511	4,803	35%
Aggressive Driving	17,168	28,378	11,210	65%
Speed Tickets	153,327	240,635	87,308	57%
Speed Stops	378,495	503,682	125,187	33%
Occupant Protection Stops	39,451	69,521	30,070	76%
Occupant Protection Tickets	57,073	87,994	30,921	54%
Total Violator Stops	1,190,487	1,442,087	251,600	21%
Roadside Assists	191,267	181,595	(9,672)	-5%

FOB Core Mission Statistics				
	1st Qtr 2001	1st Qtr 2002	Difference	% Change
DUI	3,917	5,065	1,148	29%
Aggressive Driving	5,603	10,335	4,732	84%
Speed Tickets	49,694	68,295	18,601	37%
Speed Stops	109,227	140,462	31,235	29%
Occupant Protection Stops	13,873	23,480	9,607	69%
Occupant Protection Tickets	18,142	29,268	11,126	61%
Total Violator Stops	32,472	374,429	341,957	15%
Roadside Assists	43,069	39,189	(3,880)	-9%

Core Mission Outcome Measures Selected Highways • 12 Month Comparison				
	2001	2002	Difference	% Change
Interstate 5	8,783	9,123	340	+3.8
Interstate 405	2,177	1,989	(188)	-8.6
State Route 16	659	705	46	+6.9
State Route 167	716	728	12	+1.6
State Route 520	669	652	(17)	-2.5

- Fatal collisions on interstate highways reduced by 24%.
- Injury collisions on all roadways patrolled by WSP are down 4%.

Core Mission Outcome Measures				
	2001	2002	Difference	% Change
Total Reportable Collisions (All Roadways)	30,538	31,421	883	3%
Fatal Collisions	330	344	14	4%
Injury Collisions	11,382	10,946	(436)	-4%
Property Damage	11,826	13,131	1,305	7%

- Fatal collisions on interstate highways reduced by 42%.
- Injury collisions on all roadways patrolled by WSP are down 16%.

Core Mission Outcome Measures				
	1st Qtr 2001	1st Qtr 2002	Difference	% Change
Total Reportable Collisions (All Roadways)	7,799	6,860	(939)	-12%
Fatal Collisions	69	61	(8)	-12%
Injury Collisions	2,637	2,209	(428)	-16%
Property Damage	5,093	4,590	(503)	-12%

- Fatal collisions on interstate highways reduced by 30%.
- Injury collisions on all roadways patrolled by WSP are down 10%.

Core Mission Outcome Measures (15 Month Comparison)				
	Oct. 2000 - Dec. 2001	Jan. 2002 - Mar. 2003	Difference	% Change
Total Reportable Collisions (All Roadways)	39,256	38,273	(983)	-3%
Fatal Collisions	419	404	(15)	-4%
Injury Collisions	14,539	13,148	(1,391)	-10%
Property Damage	24,298	24,721	423	-2%

Highway Engineering: Project Planning and Delivery

- **Legislative emphasis**
- **High Accident Locations***
- **High Accident Corridors**
- **Interstate Safety Matrix**
- **Leaving-the-Lane Risk**
- **Low Cost Enhancements**
- **Other Hard and Soft Engineering Solutions**

* New name from lawyers: “sites and corridors with promise”

HAL's and HAC's

Like many states WSDOT's prioritizes High Accident Locations (HAL)

- \$14.8 million biennium investment for HAL's (01-03)
 - About 1% of the Capital Improvement Investment

Going beyond HALs, WSDOT also prioritizes High Accident Corridors (HAC)

- Corridors of more than 1 mile with higher than average crashes.
- Innovative approach to meeting federal safety investment requirements.
- \$46.5 million biennium investment for HAC's 01-03.
 - About 3% of the Capital Improvement Investment



Before

Award-winning safety project; I-5 and SR 12, Lakewood Washington. Reduced crashes by 55%.

After

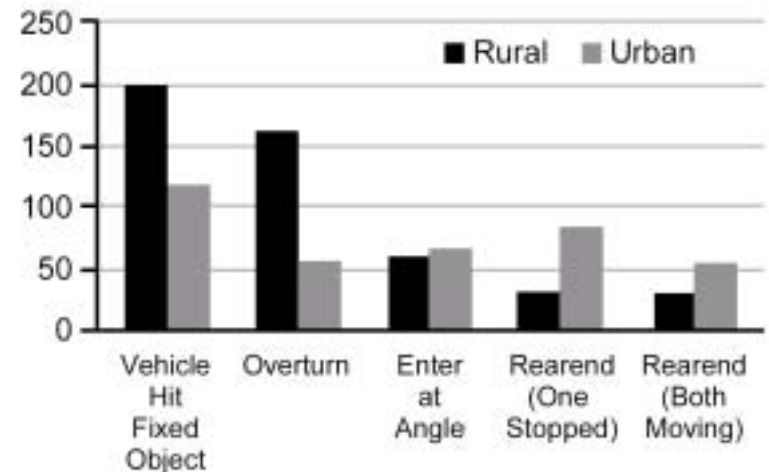


A Challenging Dilemma

- Benefit/Cost application tends to move project funding toward urban safety projects.
- AASHTO “green book” often reinforces these trends by looking at rural project B/C ratios.
- Rural area safety needs should have higher attention; especially “run-off-the-road type accidents.

Some crash types are predominately rural.

Number of Collisions 1999-2001, Average per Year



-
- WSDOT is considering building block approach to upgrading rural roadway standards.
 - Roadside first, then more where possible.
 - Building block approach means easier implementation, fewer requirements for deviation, lessened exposure to liability for design choices.

Other Initiatives

Interstate Safety Matrix

- Arrangement with FHWA providing greater flexibility than other states may have.
- \$15.3 million in 01-03

Leaving-the-Lane Risk

- Site distance, roadside improvements, lane widening, etc. to reduce probability of running off the road.
- \$13.7 million biennium investment in '01-03

Low Cost Enhancement Program

- Quick, cheap and sometimes interim steps – striping, signage, channelization, lighting, etc. – for operational improvements.

Other Engineering Solutions

- Rumble strips
- Cable guardrail
- Bridge retrofit

Corridor Safety Program

- Working with local communities to address safety with enforcement, education, engineering, and emergency medical services effort.



Before re-striping

A low cost enhancement at intersection US 101 and SR 112



After re-striping

Pedestrians & Bicycles

- WSDOT's PAL and Ped Risk Programs
 - Providing funding for known accident locations as well as addressing potential "risk" areas.
- Traffic Safety Near Schools Program
 - Getting kids to school safely
 - 70 engineering projects for \$7 million
- Modal Connections – Pilot Bicycle Route Signage Project
- Local Pedestrian Safety Projects
 - In-pavement lighting at pedestrian crossings
 - Improved overhead lighting
- 2002 - \$1.5 million in shoulder upgrades on popular bicycle touring routes



2001 Pedestrian Fatality Rates by State
Fatalities per 100,000 Population

Fatality Rank	State	Killed	Pedestrians Rate
1	North Dakota	3	0.47
2	Iowa	19	0.85
3	Nebraska	12	0.70
4	New Hampshire	9	0.71
5	Vermont	5	0.82
6	Wisconsin	45	0.83
7	Minnesota	43	0.86
8	Ohio	99	0.87
9	Kansas	24	0.89
10	Idaho	12	0.91
11	Indiana	56	0.92
12	Maine	12	0.93
13	Rhode Island	10	0.94
14	Alaska	6	0.95
15	Connecticut	33	0.98
16	Montana	9	1.00
17	Wyoming	5	1.01
18	Washington	73	1.22
19	Massachusetts	79	1.24
20	Kentucky	53	1.30
21	Tennessee	78	1.36
22	Colorado	61	1.38
23	Virginia	101	1.41
24	Oklahoma	50	1.45
25	Utah	33	1.45
26	Missouri	83	1.47
27	Illinois	186	1.49
28	Arkansas	41	1.52
29	Alabama	68	1.52
30	Pennsylvania	188	1.53
31	West Virginia	28	1.55
32	New Jersey	132	1.56
33	Michigan	182	1.62
34	Oregon	58	1.67
U.S. Average			1.71
35	Georgia	140	1.74
36	North Carolina	149	1.82
37	New York	347	1.83
38	Maryland	101	1.88
39	South Dakota	15	1.98
40	California	711	2.06
41	Mississippi	59	2.06
42	Texas	449	2.11
43	Delaware	17	2.14
44	Nevada	45	2.14
45	Louisiana	98	2.19
46	Hawaii	30	2.45
47	South Carolina	100	2.66
48	Florida	489	2.98
49	Arizona	158	3.00
50	New Mexico	72	3.94

* This table does not include one pedestrian fatality reported in the state's collision reporting system.

Source: National Highway Traffic Safety Administration

2001 Bicyclist Fatality Rates by State

Fatalities per 100,000 Population
Source: National Highway Traffic Safety Administration

Rank	State	Bicyclists Killed	Fatality Rate
1	North Dakota	0	0.00
2	Vermont	0	0.00
3	Arkansas	1	0.04
4	Oklahoma	2	0.06
5	Connecticut	2	0.06
6	Kansas	2	0.07
7	New Hampshire	1	0.08
8	Tennessee	5	0.09
9	Rhode Island	1	0.09
10	Iowa	3	0.10
11	Missouri	6	0.11
12	Montana	1	0.11
13	Pennsylvania	14	0.11
14	Utah	3	0.13
15	South Dakota	1	0.13
16	Washington	8	0.13
17	Alabama	6	0.13
18	Minnesota	7	0.14
19	Ohio	16	0.14
20	Massachusetts	8	0.14
21	Idaho	2	0.15
22	Alaska	1	0.16
23	Wisconsin	9	0.17
24	West Virginia	3	0.17
25	Virginia	13	0.18
26	Nevada	4	0.19
27	Indiana	12	0.20
28	Kentucky	8	0.20
29	Wyoming	1	0.20
30	Maryland	11	0.20
31	New York	41	0.21
32	Texas	46	0.22
33	Illinois	27	0.22
34	Georgia	20	0.24
35	Michigan	24	0.24
36	Colorado	11	0.25
37	Delaware	2	0.25
U.S. Average			0.26
38	Mississippi	8	0.28
39	Nebraska	5	0.29
40	North Carolina	34	0.29
41	California	165	0.30
42	New Jersey	26	0.31
43	Maine	4	0.31
44	New Mexico	7	0.38
45	Oregon	15	0.43
46	Louisiana	23	0.51
47	Arizona	28	0.53
48	Hawaii	7	0.57
49	South Carolina	24	0.58
50	Florida	127	0.78

Emergency Response

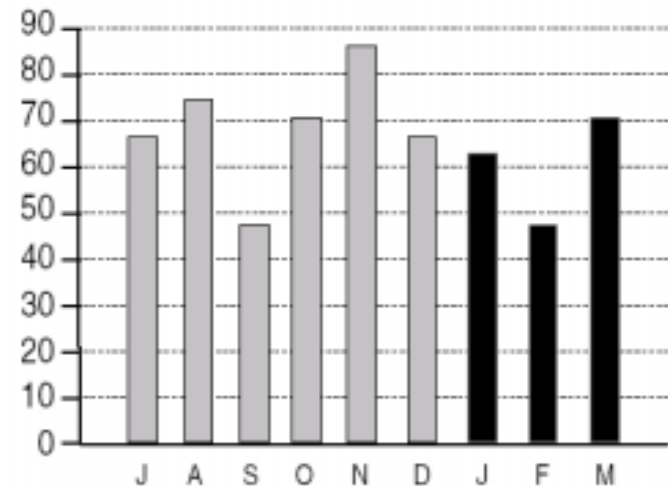
JOPS – Working together to clear accidents

A Joint Operations Policy Statement (JOPS) between the State Patrol and the Washington WSDOT. Signed February 13, 2002.

- Enhanced WSP presence in highway work zones
- Modernized accident investigation
- 90-minute highway incident clearance goal on congested freeways
- Radio interoperability
- Co-location of facilities wherever possible

“Clearing Roads, Helping Drivers”

Number of Over 90-Minute Incidents
July 2002 to March 2003



Accident Comparison
I-405 (Tukwila to Bellevue)

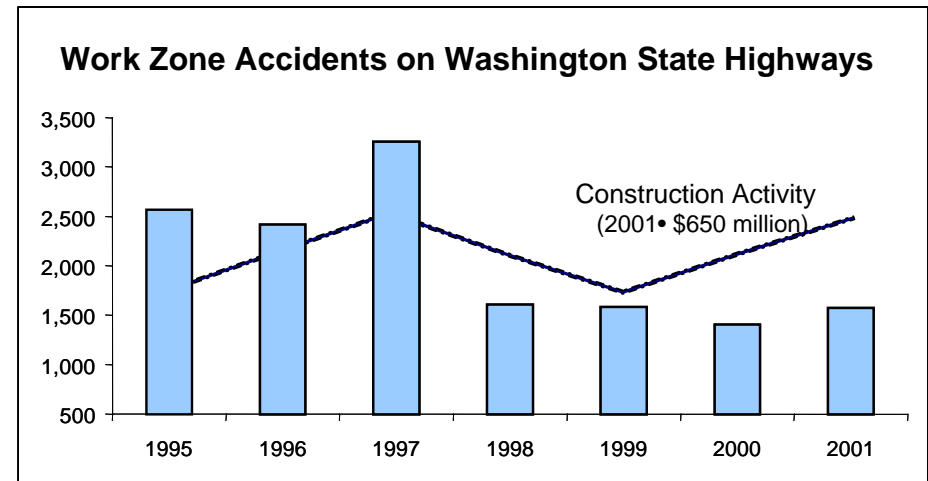
Northbound	2001	2002	% Change
AM Peak Period (Tu,W,Th)	90	90	0%
PM Peak Period (Tu,W,Th)	73	49	-33%
All Day (Tu,W,Th)	278	203	-27%
Southbound	2001	2002	% Change
AM Peak Period (Tu,W,Th)	45	32	-29%
PM Peak Period (Tu,W,Th)	105	71	-32%
All Day (Tu,W,Th)	232	180	-22%

☑ Work Zone Safety: Working to Protect the Public and Our Own in the Work Zone

The **Work Zone Safety Task Force** is a partnership with Contractors, Cities, Counties, WSDOT and WSP to improve safety in work zones.

Task Force action items:

- Clearer policy
- Improve design and construction standards
- New methods and materials
- Public education
- Workforce training
- Measuring progress



Flashing Stop/Slow Paddle

☑ Data and Technology: Challenges

- **Vehicle accident data is insufficiently and slowly assembled.**

Iowa system now being piloted

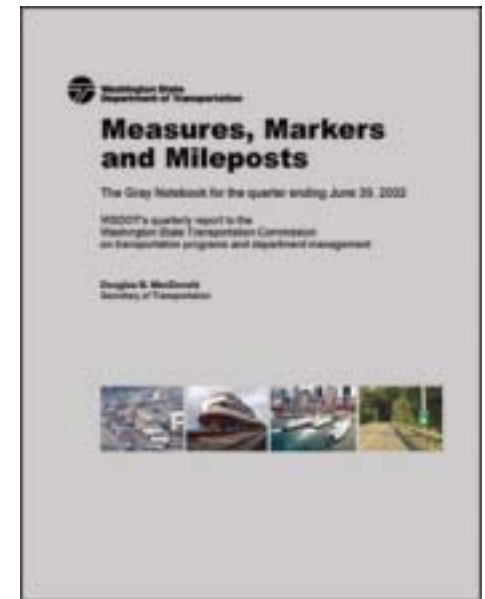
Accident data is being coordinated with hospital trauma data, licensing data and road geometry data.

- **Benefit/cost methodologies and practices need updating.**

Beginning roadside data collection (i.e. trees, slopes).

- **Performance measurement and reporting is under continuous development.**

Gray Notebook reporting frequently presents safety topics. *See attachments*



✓ Trucks

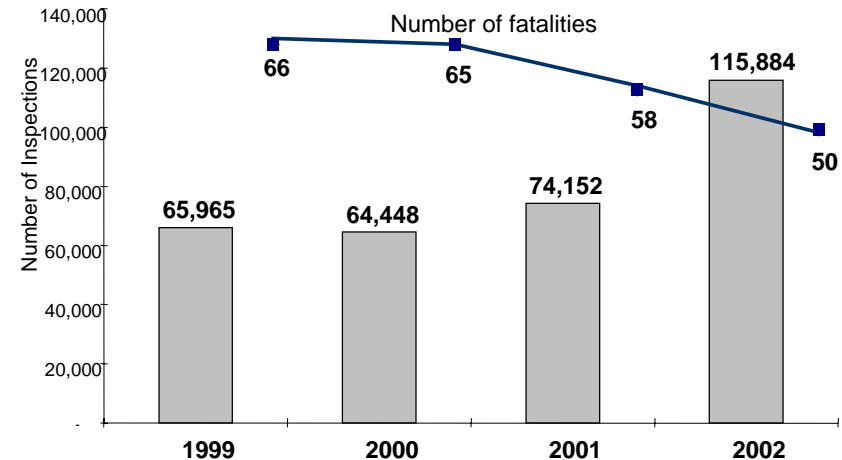
CVISN / Weight-in-Motion Program

Allows the State Patrol to bypass safe motor carriers and focus on those with lower safety record.

In 2002:

- CVISN Allowed 79% of trucks with transponders to bypass scales and WIM allowed 32% to bypass scales.
 - Officers identify vehicles that deserve closer inspection; trucks save \$9 million.
 - 27 % increase in enforcement of the commercial vehicle weight laws.
 - 56% increase in inspections
- 11% decrease in commercial vehicle related fatalities

More Commercial Vehicle Inspections, Fewer Fatalities*



*In 2001, Washington was fourth best in Commercial Motor Vehicle fatality collisions per 100 million VMT.



Trooper Inspecting a Commercial Vehicle

School Bus Inspection Program

- Each day, 455,00 children are transported on 9,000 busses, traveling 90 million miles a year.
- 100% of buses are inspected every summer.
- 25% are inspected again during the winter.
- No Collisions due to defective equipment in two years.



- In 2002 school bus collisions were down 20%.

Other Commercial Vehicle Programs

- **PRISM** (Performance & Registration Information System Management)
- **Highway Watch**
- **Step up and Ride**

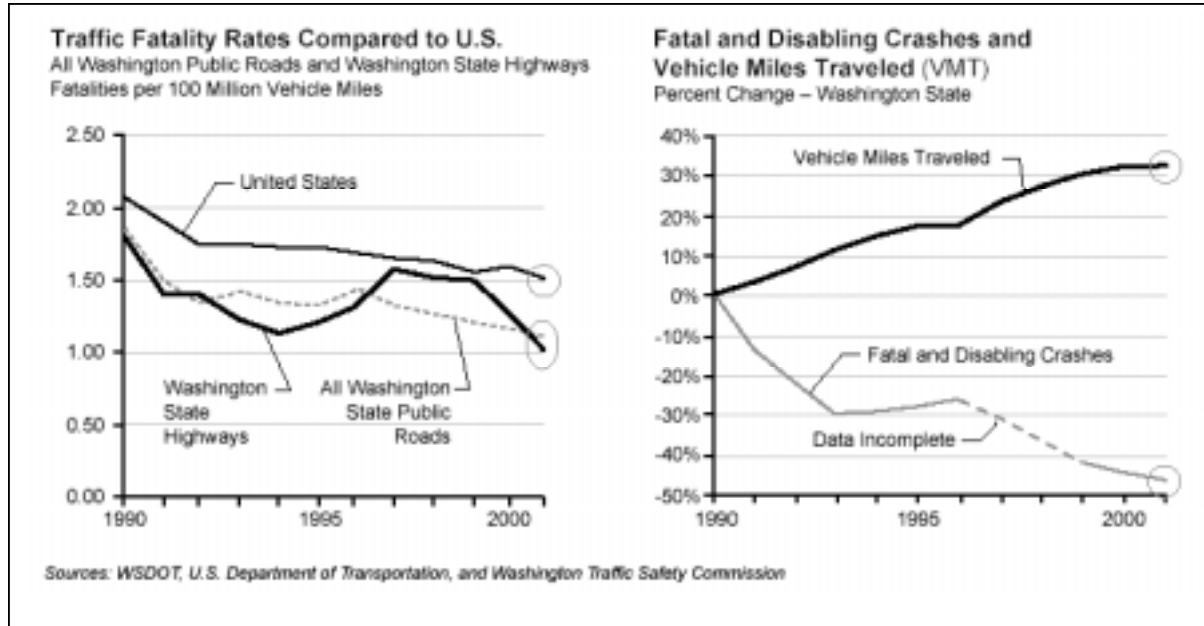




Young and Senior Drivers and Other Licensing Issues

- Intermediate Drivers License ; a.k.a. Graduated Drivers License
- Restricted Licenses
- Commercial drivers license hazardous material endorsement
- Motor Vehicle Title Information
- Education
 - Traffic Safety Education
 - Motorcycle Safety Program

How it all fits together into a TARGET ZERO Summary



“Even with successes achieved, we have a lot of work to do.”

- For 1st Quarter of 2003 we have had 61 fatality and 2,209 injury collisions.
- We see declines in DUIs and speeding, we see declines in fatalities on our highways - but we want to see more.
- We continue to work hard every day to make our highways safer and to make a difference each day in the lives of the citizens of Washington.